

## **Rebuilding Public Trust After a School Health Crisis**

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May 15, 2018

### **Abstract**

Portland Public Schools serves nearly 50,000 students in 90 schools averaging 77 years of age. Building age combined with decades of deferred maintenance created serious health and safety issues, numerous unfavorable media reports and an irate public. In response, PPS Board of Directors commissioned an independent evaluation of various building-based risks and related operational and personnel breakdowns. This is the story of how PPS regained public trust, and along with it voter support for a \$790M health, safety and modernization bond that includes funding to improve water quality, lead paint, radon, fire systems, roof repairs, asbestos, security and accessibility.

*Keywords: health, safety, lead, water, Portland bond, public relations, crisis management*

### **Introduction**

Portland Public School (PPS) district operates 90 schools with average age 77 years. The vast majority were constructed prior to 1986 when water fixtures, solder, pipes and paint containing lead were commonly used in construction. Like many other districts, decades of budgetary constraints have resulted in prioritizing classroom staffing over building maintenance, severely limiting funding for general maintenance and building renewal including health and safety issues, resulting in a backlog of deferred maintenance (DM). A recent study estimates that American schools need to spend \$135B annually to maintain, operate and upgrade existing facilities “so that all students have access to healthy and safe school facilities that support learning”. The same study estimates an annual \$36B shortfall (Filardo, 2016).

In spring 2016, district staff allowed access to drinking water in one school for nearly two weeks after test results indicated elevated lead and almost eight weeks would pass prior to notifying parents. Concerns regarding transparency already existed at PPS due to communication challenges

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inherent in a large district, but this lapse in communication about a student health issue was an eight - week fuse that resulted in complete loss of trust by the public and media. By June 1<sup>st</sup>, a public meeting would see a state senator shouted down as he tried to moderate the meeting while parents called for the Superintendent to resign. PPS was faced with an incensed parent population and unfettered media criticism (Oregonian, 2016). Just days earlier, a district-wide email had been sent to families and staff announcing all drinking fountains would be shut down and bottled water provided. In addition, the Board announced that an investigation (Stoll Berne, 2016) would be conducted focusing on the following:

- Review current systems, procedures and protocols regarding water testing;
- Evaluate management of information internally related to lead contamination; and
- Identify system operational and personnel breakdowns.

Interviews and record reviews of the period 2001 to 2016 indicated that testing was reactive and remediation records were fragmented and unreliable due to inconsistent data management protocols. Moreover, a program for periodic retesting was never established and communication of results inside administration, to parents, staff and media was found severely lacking. The investigation concluded that lead in drinking water had not been viewed by the administration hierarchy as a significant issue. In hindsight, it is now clear that the reputational impact from chronic DM combined with PPS staff responses to lead-in-water concerns was seriously underestimated leading to severe loss of public trust.

The district had no experience responding to a major public- relations crisis, however our Emergency Operations Center was effective at early decision making and remained active for weeks as bottled water distribution occurred. Although almost daily media releases were drafted, county and state health authorities engaged, and interim leadership established, two key staff were put on administrative leave spreading fear among facilities operations personnel and several key personnel

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resigned. This put the district in a very difficult position to respond to the crisis in a manner that was credible and productive. The district also ventured into the process of facilitating on-site blood-lead level screening services. On June 21<sup>st</sup>, the Governor directed the Oregon Department of Education (ODE) to adopt rules requiring schools to publish a healthy and safe schools plan. In less than 60 days ODE would pass rules. Initial anxiety about lead in drinking water in our district had broadened to state-wide rules that also included lead paint, radon and pest management.

This case study presents an account of challenges faced, mistakes made and steps taken to address these concerns and ultimately secure capital bond funding for their remediation. Bond proceeds will be used for new construction or remodel of four schools and remediation of radon and lead in water/paint in all district schools. In addition, it funds asbestos removal, roof repair, security systems, ADA accessibility and fire alarm/sprinkler systems that represent the most urgent health and safety needs.

### **Early Concerns**

PPS first conducted district-wide lead testing of drinking water in July 2001 discovering that drinking fountains in many of our schools tested above a PPS action level of 15 parts per billion (ppb). Remediation typically consisted of fixture replacement and filter installation if the fountain still tested above action level. Testing and repairs were restarted in 2011, including selected sinks. A major mistake during this earlier period was not following through on commitments to create and implement a clear plan to systematically mitigate the hazard and periodically retest.

### **Strategy Development**

The greatest challenge for any organization when faced with internal and external crisis involving media visibility, is remaining rational while taking decisive and timely action. Under these circumstances it is also difficult to prevent finger pointing and a “run for the hills” mindset. Looking back, the early stages of responding to our crisis were the most perilous times. Intense meetings,

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external investigations, inadequate and incomplete past lead testing, relentless public record requests and negative media coverage, loss of leadership, employee fear, constant response to parent requests, upset parents and teachers, frustrated Board members and general confusion on best plan of action to move forward for resolution.

A critical early step was to identify a leader who would adopt a calm, rational, yet decisive approach to develop a strategy consistent with the vision, mission and objectives of PPS. This meant selecting an individual with a history of solid decision making and big picture knowledge of PPS, yet no direct role in past management of health and safety matters. The CFO was selected for this role.

Pressure from the Board and parents grew to provide a quick solution. This required providing everyone with the freedom to vent yet also the practical facts and a realistic timeframe concerning the requirements for testing and replacing water fixtures. The first priority was to provide students, staff and parents with safe water and peace of mind by providing free blood-lead tests separate from the County. These two steps along with proactively speaking with the media and parents helped to somewhat reduce the tension level.

A pivotal decision was to centralize decision making, reducing individual and fragmented decisions, by creation of a multidisciplinary health and safety leadership team (HSLT). Next, a safe, rational, results-oriented environment was created for this team regardless of external and internal pressure for quick results. This required a laser focus on immediate and short-term needs combined with judicious long-term planning and often fearless, daily fact/data-based decision making. The CFO, Risk Management Director, Senior Director of Facilities and Interim Chief of Communications, an indispensable member, composed an initial team. It quickly became apparent that the absence of both the Health and Safety Senior Manager and Chief Operating Officer, who were on administrative leave, was a major handicap. This was resolved by recruiting non-PPS retired professionals.

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Likely the most crucial decision after assembling HSLT was to place top priority on reestablishment of trust with parents, students, staff and community through transparency. As the media feeding frenzy grew, strict adherence to this guiding principle paid dividends. However, HSLT was unaware of the scale and complexity of future issues that would need full attention over coming months.

One serious mistake made in an early stage of the crisis was our failure to engage principals and teachers in our communications by asking for their input concerning solutions and to prevent them from receiving their information from parents or the media. These individuals are at the forefront and were trusted more than district leaders.

### **HSLT Challenges and Decisions**

The logistical and financial consequences of shutting down all drinking and kitchen fixtures, installation and maintenance of bottled water and testing of 10,566 fixtures cannot be overstated. Combining the magnitude of these tasks with ongoing public record requests, media releases and interviews resulted in HSLT meeting daily for several months to address each emergent issue.

HSLT provided school water test results and multiple educational resources (Multnomah County, 2016; CDC, 2017) to parents, students and staff along with access to blood-lead testing using home test kits, a private firm and the County. Blood testing allowed individuals to privately evaluate their status, PPS to assess statistics and Multnomah County to compare results against norms and retrospectively assess source of exposure. Over 1,900 tests were performed. No elevated blood-lead cases were tracked to water consumption in PPS facilities and statistics proved to be within normal range for the community. This welcome finding did not alter PPS's commitment to minimize exposure to lead in our schools. The decision to test all fixtures was made to minimize uncertainty about a broad range of non-drinking water exposures. Several of these issues came to the attention of HSLT including handwashing, showers, eyewashes, drinking from non-drinking sources and using water

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above action level for gardens and washing vegetables. These concerns were resolved using input from non-profit, third-party experts (OHSU Toxicology Information Center, 2017), and state health professionals.

Using these resources, HSLT addressed all these concerns. Skin is a good barrier to lead in water, use of an eyewash in an emergency presents very minor exposure. Drinking from non-drinking sources was addressed by placing signage on non-drinking fixtures. Watering gardens was an initial prickly challenge until confirming that background levels of lead in Portland soil are several orders of magnitude higher than in PPS water presenting no measureable increase in risk. Washing vegetables likely presents de minimis exposure after removing soil, however best practice is to use water below action level.

Media coverage, interviews, PPS press releases and public record requests were almost daily topics for HSLT. Every member of the HSLT was interviewed by television, radio or print media, some multiple times. We viewed these issues as opportunities to create an environment of trust and respect.

We used EPA 3Ts guidelines (EPA, 2006) to conduct sampling. These guidelines require an initial “A” sample taken after water has been stagnate for 8-18 hours, testing for lead in the fixture and a follow-up flush “B” sample after water has run for 30 seconds, testing for lead in interior plumbing. PPS elected to use a 15 ppb action level compared to the EPA 3Ts recommended action level of 20 ppb in schools. Of 10,566 water fixtures in Table 1, 34% tested  $\geq$  action level. There were 1,796 drinking fountains and 471 kitchen fixtures, 324 (14%) containing lead  $\geq$  action level including 98 kitchen fixtures.

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Table 1

*Water Quality Sampling Results*

Items	Total Number of Fixtures	Number of Fixtures with A Sample $\geq$ 15 ppb	Percent of Total	Number of Fixtures with A and B Samples $\geq$ 15 ppb	Percent of Total
Drinking Fountains	1,796	226	13%	71	4.0%
Kitchen Fixtures	471	98	21%	12	2.5%
Classroom Faucets	2,525	813	32%	N/A	N/A
Other Faucets	3,799	1,246	33%	N/A	N/A
Spigots	1,366	830	61%	N/A	N/A
Showers/Eye Washes	609	399	66%	N/A	N/A
Totals	10,566	3,612	34%	N/A	N/A

Kitchen fixtures quickly became an operating challenge resulting in use of prewashed produce early in the school year. A strict flushing protocol and signage were developed to hastily reopen action-level kitchen sinks although we considered this to be a temporary resolution. Past use of lead filters was a barrier to quickly opening drinking fountains that tested below action level. Incomplete filter maintenance records on 920 drinking and faucet fixtures presented uncertainty about the accuracy of test results for these sources. To eliminate uncertainty, activation of filtered drinking fountains testing below action level was postponed until a district-wide remediation plan was complete.

HSLT updates to the Board were vital. This allowed discussion of each issue above, involving Board members in the operational challenges and decision making.

## **Lead Remediation Strategy**

Five alternatives for long-term remediation of drinking fixtures (fountains and kitchen faucets) ranging from \$3.5 – \$107M were considered. We selected the alternative (\$28.5M) that we believe offers the best balance of risk reduction and cost over a 1-2 year remediation period. That alternative includes:

- Replace all drinking/kitchen fixtures with fixtures that meet federal lead standards
- Remove all filters
- Perform A and B sampling
- If A or B sample  $\geq 15$ ppb, determine service level requirement
- Remove fixture if service level allows
- Engineer and install partial pipe replacement (PPR) if service level code requirement
- Perform A and B sampling if PPR
- If A or B sample  $\geq 15$  ppb, revisit service level requirement to remove fixture, install bottled water if needed

## **Evolving Concerns**

Although HSLT initially focused on lead-in-water issues, a number of health and safety (H&S) issues grew in importance. Lead-based paint took early root and grew to equal prominence. Oregon Department of Education issued new rules for Healthy and Safe Schools that included lead in water and paint, radon and integrated pest management. Parents, staff and media were a growing chorus about asbestos, fire alarms/sprinklers, mold, stage safety, security, seismic, playground safety and ADA accessibility concerns. This groundswell led to increased public awareness about impact of chronic DM. It became increasingly apparent that the public had viewed DM as more of an aesthetic issue and/or they were unaware of the large number of H&S issues impacted by chronic DM.



## **Building Bond Measure Support**

PPS leadership began the process of organizing and preparing for a potential bond measure request in fall 2016. Objectives were established to fully engage the public regarding H&S issues/costs and restore credibility and support for PPS. A clear and simple strategy of urgency of H&S needs and timing was established along with an inspirational future vision at all schools across the district. This was combined with 2012 bond school modernization successes and representation of the 2017 bond (PPS, 2017) as the next phase in modernization of all our schools.

Staff detailed all bond options and presented each option to the Board in early 2017, followed by a public hearing, community listening sessions, presentations to community groups and an online poll. A Bond Stakeholder Advisory Group convened to evaluate bond options and provide input to the Board. A “Road Tour” was organized to share bond details with neighborhood & business associations, community organizations, PTAs and site councils. Bond Town Hall meetings were held to discuss the status of the 2012 bond and the four schools included in the 2017 bond. A contractor conducted an instructive district-wide public opinion survey that indicated support for health and safety funding.

## **Health, Safety & Modernization Bond**

Eleven most pressing H&S facility needs were presented to the PPS Board. This included water quality, lead paint, seismic, fire alarm/sprinkler upgrades, radon, roof/building envelope repairs, asbestos, ADA, security, playground and stage safety. Total district remediation costs for these needs was estimated at \$1.65B. Each of these was assessed for institutional risk and annual capital budget applicability. Seismic was removed due to cost (\$935M) and seismic upgrades are best done during major remodeling and building replacement. Stage and playground safety can be addressed using our annual capital budget.

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Cost estimates for total mitigation of the eight remaining H&S needs totaled \$665M. Because the bond had to include modernization of four schools as part of a long-term district modernization program at a cost of \$640M, it was impractical to propose complete mitigation of the eight H&S issues.

A public opinion survey for the eight issues with proposed funding ranging from \$100M - \$200M was instructive for a final recommendation to the Board. The survey and Bond Stakeholder Advisory Committee supported the eight H&S needs at \$150M (Table 2) putting the bond total at \$790M. It is estimated that approximately 27% of the cost to modernize the four schools is used for H&S mitigation providing a total of \$324M in the bond toward H&S.

Table 2

### *Proposed \$150M for Health and Safety Projects*

Project Category	Dollar Amount
Water Quality	\$28,492,000
Lead-Based Paint	\$16,623,936
Asbestos	\$12,000,000
Radon	\$1,126,125
Fire Alarm and/or Sprinkler Systems	\$25,849,990
Roofs	\$50,907,949
Accessibility/ADA	\$10,000,000
Security Systems	\$5,000,000

Prioritization of funding for each H&S issue was initially challenging. HSLT developed the following prioritization criteria:

- Risk – Highest severity/most likely

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- Public Awareness – Highest public concern
- Operational Savings – Reduce future operating costs
- Equity – Underserved population impartiality
- Cluster of Risks – Requires multi-risk mitigation
- Readily Achievable – Year - round mitigation possible

We simplified the prioritization process by selecting water quality, lead paint and radon for district-wide mitigation because they present the highest institutional risk and public concern and are readily achievable. Roofs and fire systems were given large dollar support due to high institutional risk and operational savings. It was the largest school bond request in Oregon history and passed by a 66% majority. We believe the H&S component played a vital role in this outcome.

### **Conclusion**

Much work remains to be done to fully regain public trust and address PPS's health and safety hazards given the age and condition of our schools. But, the public's recent support of a very large bond measure is tremendously helpful in solving these problems and cause for optimism. It also represents a significant turnaround from roughly a year prior when lead issues came to the public forefront, almost exclusively in a negative light.

Our experience demonstrates the importance of having an all-hazards emergency management and response plan which incorporates process to reach out to staff, parents, the public and a wide range of media. Our success reflects the community's support of public education, their generosity and much work by PPS staff and Board in identifying and communicating health and safety needs and solutions.

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